Amphibious Operations: The Operational Response to a Third World Crisis

A Monograph by

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The conclusions show that amphibious forces and amphibious operations offer a potent operational response in a Third World theater of operations. However, this type of response may not be the total answer. Force ratios, time-distance relationships, and response time are key issues that must always be considered.

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ABSTRACT

AMPHIBIOUS OPERATIONS: THE OPERATIONAL RESPONSE TO A THIRD WORLD CRISIS

With the current changes in world structure, alliances and the reduction in the size of the armed forces of the U.S., operational art and AirLand Battle become increasingly important as concepts. FM 100-5, Operations, published in 1986, establishes what operational art is, yet this concept is usually associated with a European scenario and mature theater of war.

With the current changes taking place in the world, it becomes increasingly possible that future crises and commitment of forces will be in the Third World region. Even with this change in focus, an understanding of the operational level of war is important.

The purpose of this study is to determine if amphibious operations could be utilized in the Third World to exercise operational art and execute the operational level of war. Given that the majority of conflicts in the Third World will be in an immature theater, this suggests conditions that will require flexibility, self-sustainment, and a force capable to meet multiple threats.

The study draws on the main concepts of operational art from FM 100-5, historical examples of amphibious operations as operational art, and how these operations may be utilized in the future in conjunction with the military options available to the NCA.

The conclusions show that amphibious forces and amphibious operations offer a potent operational response in a Third World theater of operations. However, this type of response may not be the total answer. Force ratios, time-distance relationships, and response time are key issues that must always be considered.

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I. INTRODUCTION

Amphibious flexibility is the greatest strategic asset that a power possesses.

B.H. Liddell Hart

Now the elements of the art of war are first, measurement of space; second, estimation of quantities; third, calculations; fourth, comparisons; and fifth, chances of victory.²

With the end of the Cold War and the current success of what the author will term "the peace offensive" of the USSR, it appears there may be a shifting of U.S. strategy, focus, and military capabilities. This shift has the potential to affect U.S. strategy on a global level as well as many aspects of each individual service.

This realignment of focus may include force structure, areas of national interests, and locations of future conflicts based on strategic goals. Additionally, due to the probable reduction of the size of the U.S. armed forces, there will be the question of whether the U.S. can respond to a crisis in a timely manner.

This concern has been addressed by others. In a thesis from the Industrial College of the Armed Forces, this situation was addressed in the following manner:

The new policies of the Soviets may well succeed in 'removing the threat' from Central Europe and cause a shift in the world's balance of power with the use of many more regional powers than exist today. Our national debt and the reluctance of other nations to allow a U.S. presence on their soil will probably result in a reduction in our forces stationed overseas and a overall reduction in the size of our armed forces.³

When the above is taken in concert with operational art, it becomes clear that the ability of the U.S. to respond in a crisis will become an art unto itself. This is especially true when consideration is given to the threat, time space relationships, sufficient combat power, sustainment, and theater of operations. Given these parameters, operational art becomes increasingly important as a concept. Further, the linkage of strategy and tactics with regard to the commitment of forces must also be understood.

This paper will use the commonly accepted definition of operational art as defined in FM 100-5, Operations, and will explore how this art could be practiced in the future. This is extremely important when applied to the military options available to the National Command Authority (NCA) in a climate of troop reductions, base closures and possible loss of basing rights overseas. The following is one example of what may exist in the future:

The United States will have fewer overseas bases. This will be the result of budgetary considerations, the changing situation in Europe, and the increasing independence of regional powers. Also, nations will find it more difficult to allow U.S. presence or overflight rights because of their internal political situations.

The above will be addressed in more detail as the changing world structure is discussed and how this relates to U.S. interests. Because of current changes, the author will assume that the security environment will switch from

a basically bipolar one to one with many players around the globe, and that commitment of U.S. forces in the foreseeable future will be in Third World countries. This suggests an immature theater of war which has unique characteristics and considerations.

With a predictable reduction in the size of U.S. forces, there needs to be some discussion about how the U.S. might respond to a crisis. Moreover, we must review how the above conditions impact on our ability to conduct operational art.

Once this review is accomplished, the author will attempt to establish if amphibious forces and amphibious operations are best suited to respond to a crisis based on the following established assumptions:

- o U.S. forces will be committed in the foreseeable future in Third World countries.
- o The theater of war or operations will be immature.
- Committed forces must be tailored to meet multiple type threats (i.e. light/mech/armor).
- o Airfields/port facilities may not be available.
- o Forces must be self-sufficient for at least 15 days.
- o Forces must be transportable in one lift (air/surface) and capable of forced entry.

o The force must be flexible enough to conduct various missions (military options) as established by the NCA.

Based on these assumptions, further evidence and geography, the author will determine if amphibious operations offer the NCA the operational response to a Third World crisis.

II. OPERATIONAL ART

Operational art is defined in FM 100-5 as:

The employment of military forces to attain strategic goals in a theater of war or theater of operations through the design, organization and conduct of campaigns and major operations.

The key points are attainment of strategic goals and design and conduct of campaigns. The question that comes to mind is, "With all the aforementioned changes, can this be done?" Before attempting to answer this question, additional information is needed on operational art.

Further clarification of, or an additional understanding of operational art is as follows:

Operational art requires broad vision, the ability to anticipate, a careful understanding of relationships of means to ends, and effective joint and combined operations.

Operational art falls somewhere between strategy and tactics; for all practical purposes, it is the linchpin to successful campaigning and attainment of national goals.

To keep the importance of operational art in perspective it is necessary to comment on national goals. national interests, and how all three relate. The relationship of national goals and national interests can be defined in the following manner:

National goals reflecting national interest in self-preservation, independence, integrity, security, economic well-being and other generalized values are considered vital to continued existence as a nation-state. The achievement of national goals depends on the protection of national interests. The purpose of military forces is to provide means for the advancement of national goals by protecting national interests...

A nation achieves or protects its vita: interests by using its national power to influence events or behavior.8

Once the use of military force enters into the equation, an understanding of operational art becomes important. This understanding is important because of the linkage it establishes between strategy and tastics. This linkage can be addressed in another manner:

Strategy is the comprehensive direction of power to attain ends. Tactics is the employment of specific means to obtain immediate goals. Operations is the linkage of tactical actions to achieve strategic objectives.9

Prior to addressing the range of military options available to the agents of the NCA, a final comment is offered on operational art. FM 100-5, clarifies operational art in the following manner:

Reduced to its essentials, operational art requires the commander to answer three questions:

- (1) What military condition must be produced in the theater of war or operations to achieve the strategic goal?
- (2) What sequence of actions is most likely to produce what condition?
- (3) How should the resources of the force be applied to accomplish that sequence of actions?10

The above quotation also has applicability to the selection of military options.

Prior to establishing what options are available to the NCA, two terms must be understood. The first, is crisis and the second is who are the agents of the NCA.

The definition of a crisis can be found in JOPS Volume IV. It defines a crisis as:

An incident or situation involving a threat to the United States, its territories, sitizens, military

forces, and possessions or vital interests that develops rapidly and creates a condition of such diplomatic, economic, political, or military importance that commitment of U.S. military forces and resources is contemplated to achieve national objectives. 11

The last part of the quotation is key because it discusses, "the commitment of U.S. military forces", 12 thus suggesting a use of military mission options.

Before discussing military mission options, it is important to establish who the "agents" of the NCA are.

An agent is defined in the following manner:

Congress has legislated that the commanders of unified and specified combatant commands (CINCs) are the agents of the National Command Authorities (NCA) who are responsible for effective military action. The CINC, the Chairman of the Joint Chiefs of Staff, and the NCA have a wide range of possible military responses to a situation.¹³

From the above it is clear that the CINCs will be the agents executing the military mission options.

The possible military options available to the NCA to respond to a crisis are as follows:14

- o Presence
- o Show of Force
- o Demonstration
- o Special Operations (psychological operations/
 unconventional warfare/civil affairs)
- o Quarantine
- o Blockade
- o Force Entry

The intent at this point is not to provide extensive definitions of each, but to illustrate that there are in

fact a host of options available that may be used over the course of the crisis. Consequently, a specifically tailored military force may have to execute operations which range from a show of force to a forced entry, depending on how the crisis progresses. When this is applied to operational art it is apparent that there should be a desired end state established. The following applies:

Articulation of an operational end state is fundamental to any use of armed force at the operational level. Knowledge and practice of the elements of operational design or the employment of large units do not, of themselves, place one at the operational level of war. 15

The key is the end state, for that will drive forces needed, military mission options, and should be related to U.S. strategy, national interests and goals.

At this point it is valuable to discuss the changing world situation in relation to U.S. strategy, national goals and interests. This discussion will concentrate on the third world to remain within the author's established assumption of where U.S. forces will be committed in the foreseeable future.

III. CHANGING WORLD

Until recently, it was a generally accepted premise that the world had developed into a bipolar system with regard to nations and international power. The two powers or superpowers were the United States and the USSR. This point is firm! *stablished by John Spanier in his book, Games Nations Play. 16 Though the United States and the USSR will remain superpowers in the near future, the world is changing.

The Soviet empire seems to be collapsing, problems continue in Central and South America, the Philippines are far from stable, and even South Africa seems to be making changes. While all of this is taking place, old nations look to a new independence and old partners wonder if it is economical and prudent to continue to have U.S. bases on their soil. All of the above suggest a change to a bipolycentric world.

The above changes in the world power structure are described by John Spanier in the following manner:

The "bi" refers to the continuing super status of the United States and the Soviet Union. The "polycentric" in bipolycentric refers primarily to the new state actors of foreign policy. In a multipolar system, there are a number of roughly equal great powers; in a polycentric system, there are numerous actors whose "power" varies considerably, although none of them is the equal of the superpowers, who remain at the top of the state hierarchy.17

All of the above lead to instability and as Mr. Spanier continues:

A second reason for the instability of a polycentric system follows from the multiplication of Third World states in the wake of the collapse of European colonialism: the more states there are, the greater is the scope for conflict.18

Though many of our nation's leaders and other world leaders view the changing world order as a prelude to peace, others do not.

Despite the optimistic belief that world peace may be "breaking out" with the warming of superpower relationships, 32 conflicts were ongoing at the end of 1988.19

If it can be accepted that changes are in fact taking place and alliances are changing, then there is a possibility that the U.S. may lose bases and/or basing rights overseas. In addition, with the possibility of war diminishing in Central Europe, future conflicts may take place in the Third World regions of the world. The following has credence, especially in relation to bases:

Today, the United States must wrestle with the problem of how to execute a military strike whenever it is needed in the world, from a declining number of U.S. bases.²⁰

Continuing with the same thought:

The use of military force will become increasingly politically contained and primarily confined to bases at sea.²¹

Political constraints will require that any commitment of U.S. forces must be based on strategy. Further, if military leaders are to employ military forces at the operational level of war and execute operational art to achieve strategic end states, there must be a

defined strategy that establishes national goals, objectives and interests.

When a nation forms a strategy, it is an accepted premise that military force can be a part of that strategy. However, to understand how military force is linked to strategy, there must be an established stratety that links national goals and interests.

At this point a series of questions must be answered. What is U.S. strategy, what are our national goals, interests and how will military force be used?

Though the U.S. seems to have a different strategy for each of the various regions of the world, there is one overriding strategy:

Developing a strategy involves relating ends and means. America's fundamental strategy is to secure our objective and defend our interests by deterring aggression against the United States, its allies, and its interests. This requires that potential adversaries perceive that the costs to them of initiating aggression are likely to outweigh any benefits they might accrue. We also seek to prevent coercion of the United States, its allies or friends by any adversary.²²

In addition to the above, the U.S. has always advocated a world of free, prosperous democratic states whose goal is economic cooperation.²³

In concert with our strategy and national goals, the U.S. has had as its basic national security objective, the preservation of the U.S. as a free and independent nation, that is able to maintain its fundamental

institutions and values.24 With this objective there are many lesser objectives; however, two stand out:

- o Ensure access to critical resources, markets, the oceans, and space for the United States, its allies, and friends.
- o Encourage and assist our allies and friends in defending themselves against aggression, coercion, subversion, insurgency, terrorism and drug trafficking.²⁵

These two stand out because each tends to suggest where the U.S. may, in the foreseeable future, commit forces. Because of the importance of the first to a maritime nation (i.e. U.S.), and the continued need that the U.S. will have for resources and new markets for goods, Third World nations and surrounding regions will continue to play a dominant, or a more important role in our strategy and livelihood. This suggests a commitment of U.S. forces to these regions to achieve national goals and interests. A perfect example of this is the commitment of U.S. forces to the recent Persian Gulf crisis.

Since most of the above regions of the world are on or near the main sea routes and principal strategic waterways of the world, 26 this suggests that a maritime strategy will be a major factor when it comes to protecting U.S. national interests. Further, this suggests a preponderantly naval campaign in a time of crisis.

If all of the preceding issues are combined, to include a reduced Soviet threat in Central Europe, amphibious operations may hold the key when using military forces in support of U.S. strategy. The use of amphibious operations may be particularly useful with the reduction of U.S. bases overseas, the creation of a polycentric world system, a reduction in defense resources and environment in an immature theater (Third World), are considered.

In addition to the above, a naval campaign suggests a maritime strategy at some point. It must be remembered that the U.S. is truly an island nation. This suggests the following:

The world's coastline, however, will become the 'arena of action' for an 'island' nation whose trade is essential to the maintenance of its power. This leads us naturally to a national maritime strategy. It is not only the best strategy in terms of protecting the real interests of the United States, it is probably the only strategy that can be implemented with diminished defense resources and that the perceived diminished threat will deem economically reasonable.²⁷

It follows naturally that one of the questions asked could be, "Why an amphibious operation and not an airmobile or airborne operation?" This will be addressed in Section V in relation to the assumptions made by the author.

IV. AMPHIBIOUS OPERATIONS, OPERATIONAL ART, AND HISTORY

Before discussing why an amphibious operation may hold the key to responding to a future crisis by executing operational art, it is important to establish the purposes of amphibious operations. In establishing the purposes three classic historical examples will be used. Once this is accomplished, the author will discuss three additional historical examples to illustrate how amphibious operations met the parameters of operational art.

An amphibious operation is an attack launched from the sea by naval and landing forces. These forces are embarked in ships or craft and involve a landing on a hostile shore.²⁸ The purposes are as follows:²⁹

- o To prosecute further combat operations.
- o To obtain a site for an advanced naval base or airbase.
- o To deny the use of an area or facilities to the enemy.

Examples of the above are many, yet some key operations from history provide excellent illustrations.

An example of, "to prosecute further combat operations," is the landing at Normandy. The Normandy landing was conducted to launch an attack against the heartland of Nazi Germany. 30 An "amphibious operation to obtain a site for an advanced naval base or airbase,"

is best exemplified by the costly assault on Iwo Jima. This operation was conducted to obtain an air base, which was to be used by the Army Air Corps to conduct air operations against Japan. Finally, "an amphibious operation to deny the use of an area or facilities to the enemy," is best portrayed by the landings and seizure of Guadalcanal. This operation was conducted to deny the Japanese the airfield facilities on the island and thus prevent them from interdicting the line of supply from Pearl Harbor to Australia. The previous examples were used to establish the purpose of amphibious operations, yet are these types of operations operational art?

If operational art is the employment of joint military forces to achieve goals in a theater of war through the design and conduct of campaigns and operations, 3 then historically there must be some examples that meet these parameters. Considering that amphibious operations are historically joint in nature these types of operations will be discussed.

The following operations suggest that the above criteria were met.

- o Guadalcanal
- o Inchon
- o Rescue of the SS MAYAGUEZ

In reviewing these campaigns it is the intent of the author to establish that amphibious operations meet the parameters of operational art. Once the United States entered the war in 1941,
American military and political planners met with British
leaders, both political and military, to establish a
strategy for defeating Germany and Japan. Early in these
discussions, it was decided that a defeat of Germany
first, and Japan second would be the strategy to be
pursued. This strategy thus dictated resourcing and
allocation of aircraft, troops, munitions and the supplies
necessary for war.

Since the Pacific would be the secondary theater of war, the strategy agreed upon would initially be a "holding action."³⁴ How was this translated into campaigns or operations?

American and British leaders decided the following in defining the "holding action" for the Pacific:

American and British leaders eventually agreed, that, at the very least, an effort must be made to hold Australia; to do so meant the continent's line of communications with the United States must be kept open.³⁵

To do this, the United States put garrisons on a string of islands, running from the Hawaiian Islands, towards New Zealand and Australia. These islands were Palmyia, Canton, Samoa, Fiji, and New Caledonia. The garrisons were small, but it was hoped that if the islands could be supported by carrier air or heavy bombers, they would hold. Later, Midway proved that this concept was valid.

The Japanese executed a similar strategy and were able to seize numerous islands, given the weakness of the

Allies. These strings of bases, "the outer defense perimeter of the GREATER East Asia Co-Prosperity Sphere," were seized early.³⁷

The largest island seized was Rabaul. This island provided the Japanese with a large fleet anchorage and numerous airfields. From this large base the Japanese continued to expand and eventually took Tulagi and Guadalcanal. By taking Rabaul, Tulagi and Guadalcanal the Japanese had cut the Allies lines of communications and threatened not only Australia but the sea lines of communications that would be used to reinforce Australia. Additionally, the Japanese began building an airfield on Guadalcanal. This airfield could be used to interdict our shipping.

After the Japanese suffered a stinging defeat in the battle of Midway from 3-6 June 1942, the U.S. saw an opportunity to go on the offensive. Guadalcanal become the target. An amphibious assault to secure the island and to take the airfield was in concert with the overall strategy decided on earlier by the Allies:

The immediate strategic objective of the first allied advance in the Pacific was to hold the line of communication between the west coast of the United States and Australia.³⁸

From the above, it is clear what the strategic objective was. Further, the operational objective was taking and securing the island, while the actual landings became the tactical objective. Thus, there was a linkage of tactical

objectives, operational objectives and strategic objectives. When compared to the following parameters from FM 100-5, the Guadalcanal operation demonstrated the requirements for operational art:39

- o Coordinated actions of large forces in a single phase of a campaign.
 - o Fundamental decision when and where to fight.
 - o Broad vision.
 - o Joint and combined cooperation.
 - o Achievement of strategic goals.
 - c Sequence of actions.
 - o Application of resources.

All of the above parameters were met to one degree or another. In the Guadalcanal operation, we see an example of an amphibious operation being executed at the operational level.

The second example of an amphibious operation accomplishing operational objectives is the landings at Inchon during the Korean War. While most students of military history are sufficiently aware of the Korean War and the execution of the Inchon operation, some background information is necessary. The entire Korean campaign can become complicated considering all the interweaving of the political and military aspects. However, the amphibious operation at Inchon was straightforward.

On 25 June 1950, the North Koreans invaded South Korea across the 38th parallel and by August had pushed

American, South Korean, and United Nations forces into a small pocket in a perimeter located at Pusan. 40

As early as 4 July 1950 General MacArthur had envisioned an amphibious assault. The intent of this operation was to cut the lines of communications of the North Koreans.41

Inchon became the target for obvious reasons:42

- o Inchon was the seaport of Seoul.
- o There were excellent railroads running north and south.
- o There were adequate highways running north and south.
- o The national telephone and telegraph nets radiated from Seoul.
- o Kimpo, Korea's largest and best airfield, lay between Inchon and Seoul.

All of the above offered Inchon as the operational objective of this portion of the campaign. During this operation, as with most amphibious operations, one can see: joint operations, sequencing of operations (i.e. taking of Wolmi Do island prior to landing at Inchon), combined operations (use of British cruisers) and bold maneuver with vision. All with Guadalcanal, this operation offers an excellent example of an amphibious operation at the operational level of war.

In a historical context, both Guadalcanal and Inchon demonstrated operational art for they met the

parameters as established in FM 100-5. This is particularly true in meeting the requirement of, "attaining strategic goals in a theater of war or theater of operations through the design, organization, and conduct of campaigns and major operations." But how does this apply today when the use of military force is usually of short duration with limited objectives?

An appropriate example which may be considered occurred in 1975:

The Mayaguez incident began for the U.S. armed forces at 1612 on 12 May 1975 when the National Military Command Center received a report from the American Embassy Jakarta that a merchant ship, the SS MAYAGUEZ, had been seized on the high seas. The ship had been fired on, boarded, and captured by Cambodian forces in international waters at about 1130 on 12 May while transiting a standard sea lane and trade route in the Gulf of Thailand. 45

Initially, the first action taken was to launch reconnaissance aircraft to locate the ship. These reconnaissance sorties continued until the operation was complete. In concert with these reconnaissance sorties, the President attempted to use diplomatic actions. It was hoped that these actions would result in the release of the crow and ship. 17 The diplomatic actions failed and a military response was directed.

Initially, American warships were diverted from various locations in the western Pacific to the waters off Kompang Som, Cambodia. Additionally, amphibious ready groups, which were in the process of returning Marines to

Okinawa after Operation Frequent Wind (evacuation of Saigon), were ordered to Subic Bay. 48

For various reasons the Air Force provided transport aircraft to augment the Marine amphibious force. Thus, a joint operation consisting of Air Force, Navy and Marine elements was involved. Early on, the mission required the recovery of the MAYAGUEZ and the crew. It was suspected that the crew was being held on Koh Tang island.

The MAYAGUEZ itself was anchored off Koh Tang
Island. To recover the crew and board the MAYAGUEZ, the
Marines would therefore have to execute two missions
simultaneously.

Prior to the execution of these two missions, the crew of the MAYAGUEZ had been moved and was not on Koh Tang island. The crew was released later and was recovered by the USS WILSON. This action took place after the Marines had landed on Koh Tang.

Though the operation was of limited duration and scope, it satisfied the strategic objective of sending the signal that the U.S. would not tolerate the seizure of its ships or citizens on the high seas. This is in agreement with U.S. national goals and interests of ensuring access to the oceans and protection of its citizens. Thus, the operation provided the linkage to the strategic objective and there was an "understanding of the relationship of

means to ends and effective joint and combined operations."49

The previous three examples provide excellent examples of amphibious operations as operational art. The question at this point is, "How does this apply today?"

V. ASSUMPTIONS AND AMPHIBIOUS OPERATIONS

Before establishing why amphibious operations may hold the key at the operational level when using military forces to achieve national strategy, some assumptions must be made. As previously established, because of the changing world structure and U.S. interests, U.S. forces will be committed to Third World countries or regions in the foreseeable future. Because of political constraints, reduction of U.S. bases and basing rights, airfields or port facilities may not be available. Additionally, one or more countries in a region may be hostile to the U.S. and its policy, thus not allowing the use of these facilities and may even pose a threat to U.S. forces. Finally, the host country's infrastructure may not have a sufficient airfield or port facility readily available.

Further assumptions as previously established are:

- o A committed force must have tailored combat power to contend with a variety of forces (i.e. light, mech, armor).
- o The force must be self-sufficient for at least 15 days, without the use of a host nation's airfields or port facilities.
- o Transportation of the force must be executed in one lift and the force must be capable of forced entry.

If these assumptions are valid, then an amphibious force and maybe an amphibious operation may be the operational response when responding to a crisis in a Third World country. The obvious question is, "why?" The answer to this simple "why" has many parts.

First, the Third World regions of the world are dominated by sea routes and coastline. In addition, many of the third world countries that lay on these sea routes provide vital resources to the U.S. and have been determined to be strategically vital to the U.S. For example, the Caribbean Basin has been considered strategically vital for some time by the U.S. This area is important for its oil and as a communications nexus. Because the area is considered to be strategically vital, the U.S. has intervened militarily in this region on a frequent basis. 50 The recent operation, JUST CAUSE, is a perfect example.

A further example is the Indian Ocean. This area includes the entire east coast of Africa, all the coastline of India, a large portion of Australia's coastline and the critical Strait of Malacca (Singapore). Many of the world's oil shipping routes are in this region of the world. Additionally, this is "a major area of conflict."51

Because of the flow of petroleum from the Persian Gulf and the unstability or fragility of many of the coastal states, the Indian Ocean is potentially a major area of conflict.⁵²

A second part of the answer involves the inherent qualities of a maritime strategy and how amphibious operations provide an operational response when implementing U.S. strategy. A further amplification is as follows:

Maritime strategy brings unique qualities of flexibility and mobility to national strategy.

Mobility lies in the very nature of maritime power. 53

Campaigning is indeed part of the operational level of war and campaigns have these characteristics: 54

- o Execution is directed toward strategic aims
- o Will include the synchronization of air, sea, and land forces
- o Joint and Combined operations
- o Manuever is the essence of modern military campaigning,

When the above characteristics are applied to amphibious operations it seems that these operations are more than able to achieve national interests in these regions of the world.

The final part of the answer relates to the military options available to the NCA in a time of crisis. As previously stated, these options range from a presence to forced entry.

If a crisis is slow in developing or if we desire to send a signal to a potential hostile country, the NCA can do so with a naval force augmented with an amphibious ready group. In a third world region it would be

extremely easy to move from a presence (ships off the coast or over the horizon to a forced entry [amphibious assault]). Historically, the Navy and the Marine Corps have been used in responding to a variety of crises.

Between 1946 and 1982, in some 250 instances of employment of American military forces, naval forces constituted the principal element of our response in about 80% of the crises.⁵⁵

More important than the historical use of naval forces for crisis response are the advantages such a force gives the "CA. The key reasons are as follows:56

- o Forward-deployed posture and rapid mobility with a significant deterrent force.
- o High state of readiness.
- o Continued operations in the Joint and Combined arena.
- o Sustainment of the force indefinitely at distant locations, relatively independent of foreign basing or overflight rights.
- o Naval forces bring the range of capabilities required for credible deterrence: presence, threatening use of force, landing of forces, and blockade or quarantine.
- o Naval forces have unique escalation control characteristics that contribute to effective crisis control.

From the preceding it is clear that all of the military options available to the NCA can be executed by a naval

force reinforced with an amphibious ready group.

At this point the author will justify the assumptions, and why they were made.

Given the various degrees of sophistication in weapons systems that could possibly be encountered in the Third World, it is necessary to have a force that has the tailored combat power to contend with a variety of forces. They could range from light forces (low-end) to a armor/mechanized force (high-end). The intent of this paper is not to argue for or against any particular service, however the organization of the U.S. Marine Corps' Marine Expeditionary Unit (MEU), Marine Expeditionary Brigade (MEB), and Marine Expeditionary Force (MEF) offers a solution.

As with any solution, force ratios must be addressed prior to commitment. A Marine Expeditionary Force, of whatever size, is only a starting point when considering force ratios. Appendices A through C depict the various organizations and are provided as a reference for the reader. Included in the illustrations are personnel totals and major weapons systems.

As can be seen from the figures, each force has a credible amount of combat power. Additionally, as one progresses from the MEU to the MEF, combat power increases. Therefore, these forces are already tailored and can be used to respond to various threats. This gives the NCA an inherent amount of flexibility. Further, these

forces train and operate routinely in these configurations. This air-ground task force exploits the combat power inherent in carefully integrated air and ground operations. These tailored forces enable a commander to deal with the various degrees of sophistication of forces and weapons systems that could be encountered in a Third World.

Clearly, the point can be made that an airborne force or air mobile force could be task organized with similar combat power; however, this argument is flawed. The following establishes the reasons and highlights the flaws:

While movement by air is faster than surface transportation, airlift is dependent on the availability of useable, secure airfields at the destination. Airlift also restricts the amount of heavy equipment which can accompany the force. 58

Additionally, to have the necessary fixed wing aircraft to exploit the advantages of air-ground operations, requires the addition of another service which needs bases from which to operate. Further, there are unique command relationships that must be addressed if this avenue is chosen.

The next assumption is if a force is to be committed to a Third World region, it must be self-sufficient for at least 15 days without the use of a host nation's airfields or port facilities. The reasoning behind this statement is based on three assumptions. First, a forced entry is required; therefore, an airfield

and port facility may not be available in the country where operations will take place. Additionally, other countries may not allow us to operate from their facilities due to political constraints. To highlight this point, the following applies:

As part of our forward deployment strategy, we depend on the continued use of overseas bases. However recent political events in several countries have brought into question whether we can continue to do so. The fact is, our overseas basing rights are diminishing.⁵⁹

Second, most operations in response to a crisis are of short duration but not so short as to negate the need for sufficient logistical support. If a force arrives with a self-sufficient capability for 15 days, this force could be resupplied by sea after that period no matter where the force was committed in the Third World. This is based on th fact that a resupply ship or group of ships, cruising at 17 knots can travel 6,000 nautical miles in 14 days and 17 hours. 60 Currently, there is no Third World country susceptible to amphibious operations that is outside of this 6,000 nautical mile radius from a U.S. base or friendly allied nation. The idea that combat forces would have to be resupplied by ship is again, based on the assumption that an air facility or sufficient aircraft may not be available. Further, if an airfield is available it may or may not be in any condition to accept aircraft.

The final reason for the 15 day, self-sufficient, logistical support requirement is based on the ability of

an amphibious force to construct an Expeditionary Airfield (EAF). Currently, the Marine Corps can deploy a "Short Airfield for Tactical Support" (SATS)⁶¹, with an amphibious force. Essentially a three thousand-foot strip with the necessary taxiways can be constructed in five days.⁶² During the Vietnam War an eight thousand-foot installation was constructed at Chu Lai in 25 days.⁶³ A SATS field constructed in five days would enable a committed force to conduct tactical operations from that field and accept resupply aircraft.

The third assumption to be addressed is if the NCA is driven to commit a military force in a Third World country or region and the military option is forced entry, then that force must be transported in one lift to promote success. This assumption is based on the need to generate sufficient combat power to deal with a threat that can have a mixed capability. Additionally, a one-lift criteria allows for a potential rapid massing of combat power.

A naval force with an amphibious ready group has that capability. Currently the U.S. Navy has the capability to transport and conduct a forcible entry by the 55,000 men of a Marine Expeditionary Force (MEF).64 The logistical element of this force provides all the necessary support to include medical and dental support, and is capable of supporting a MEF for 60 days.65 The initial assault forces have sufficient logistical support

for 15 days. 66 As can be seen from Appendix C this force has the necessary combat power to deal with a Third World country armed force, even if it is at the high end of the spectrum (armor/mech heavy). However, force ratios must be considered and computed correctly. At this point, if all the assumptions postulated can be accepted, it is clear that amphibious forces and operations offer the military planners and agents of NCA a unique force with capabilities to conduct operational art at the operational level of war.

Early on in this paper a definition of operational art was provided, yet there is one final aspect of operational art that needs to be addressed. In discussing operational art, the point is made:

Its essence in the identification of the enemy's operational center-of-gravity - his source of strength or balance - and the concentration of superior combat power against that point to achieve a decisive success. 67

With that as a starting point, can amphibious forces accomplish this mission given the assumptions about when and where U.S. armed forces will be committed?

The answer to the above is yes if one considers two parts regarding center-of-gravity. The center-of-gravity of an armed force:

Refers to those sources of strength or balance. It is that characteristic, capability, or locality from which the force derives its freedom of action, physical strength, or will to fight... But an operational center-of-gravity may also be more abstract - the cohesion among allied forces, for example, or the mental and psychological balance of a key commander. 68

It would be flawed thinking to offer that one MEF, though a capable fighting force, could confront all possible threat forces in Third World head on to get at the center-of-gravity of an armed force. Yet, the second part of the quotation offers the practitioner of operational art an opportunity to truly exploit the capabilities of an amphibious force by landing where the enemy strength was not.

As previously established, most Third World countries are bordered by the sea; therefore, there is an opportunity to move into an enemy's rear. General George S. Patton articulated the importance of this positioning of forces in the following manner:

You can kill more soldiers by scaring them to death from behind with a lot of noise than you can from the front. 69

Thus, amphibious operations enable a planner to plan operations with sufficient force to attack that center-of-gravity offered by "the mental and psychological balance of a key commander." No commander can ignore a force that has the potential to strike where it is not expected with a credible force.

Up to this point the author has established how amphibious operations have been used historically to execute operational art, and how the parameters of operational war are satisfied by the employment of amphibious operations. Further, assumptions have been established that suggest amphibious operations would in

fact be the course of action of choice by the NCA in executing military options in the third world. Yet, all questions have not been answered. What about the future?

VI. THE FUTURE

Though not addressed in the assumptions, it is clear that if an amphibious force is to respond in a crisis, there must be sufficient warning to enable the naval force to sortie and arrive on time. Additionally, if a particular amphibious force does not have sufficient combat power (force ratio) to adequately deal with a threat, it must be reinforced.

The above conditions seem to suggest a joint operation involving all services to achieve a desired end state. If speed is of the essence, then an airborne operation is suggested, involving the Army and the Air Force. An airborne force does not necessarily need an airfield yet there are limitations. General George S. Patton alluded to these shortcomings in the following manner:

One of the chief defects of an airborne division is the fact that it never has anything it needs after it lands. No tanks, no adequate artillery, and no transportation.⁷⁰

Though some of these conditions have changed (i.e. tanks) additional limitations are as follows:71

- o It must rely on USAF tactical or strategic airlift for initial entry into battle and for resupply.
- o It requires more close air support than normally provided to infantry divisions.

- o It has limited ground and airmobility once delivered.
- o It is vulnerable to attack by enemy armor or motorized formations due to limited antiarmor capability.

A further limitation is as follows:

Today the Army only has one airborne division, a ranger regiment, and three separate battalions of airborne troops to use for planning. Evenmore, this small amount is scattered from Alaska to Italy. Being under three major commands (Forces, Southern, and European) these forces are not very supportive of short notice airborne assaults.⁷²

Though both of these conditions can be viewed as distractors, an airborne force still can move faster than an amphibious force if there is no warning of a pending crisis. Further, though light, it is a force with credible combat power.

To offset an airborne force's lack of combat power and to capitalize on its speed, it is suggested that joint operations utilizing airborne and amphibious forces are the answer for future operations in the third world. By using these "type" forces in concert, force ratios can be generated in locations that are favorable to the attacker (U.S.), and provide lodgements if necessary for follow-on forces. These follow-on forces could be used for an extended land campaign if necessary. Each type of force complements the other and truly brings the practice of operational art to the employment of forces. The employment of these forces simultaneously would enable the

NCA to respond to a crisis effectively with regard to all the available military options. Stated differently:

Joint amphibious/airborne operations are most likely to be an exercise of national power projection, directed by the NCA, in response to a crisis.⁷³

In addition to the above, the difficulties an enemy would encounter trying to counter such a force may provide such a psychological problem that his center-of-gravity may be attacked. Stated in a different manner:

Deploying the amphibious and the airborne forces simultaneously maximizes their potential synergism, gives depth to the offense, and presents the enemy immediately with a difficult defense problem.74

If the above is taken in concert with previous assumptions, it is apparent that the optimum solution would be an integrated use of the two forces. Though each type of force used separately may be able to handle one particular mission, used together there is a surer chance of success in responding to a crisis. The use of these two unique forces satisfies the parameters of operational art and optimizes resources. Whether it be the practice of operational art or accomplishing the mission, the following applies:

The overall joint or allied commander in each theater of operation plans and executes campaigns and major operations that optimize the use of all available combat, combat support, and combat service support forces. Ground, air and naval operations are synchronized to support each other and to fulfill the requirements of the overall joint commander's campaign plan.⁷⁵

The use of an amphibious force and an airborne force allows a commander the flexibility necessary to operate at

the operational level of war and accomplish the mission in an effective manner.

VII. CONCLUSION

Given the military options available to the NCA in responding to a crisis, an amphibious force is both a unique and powerful force. Historically, this type force has been used in various actions from total war to a peace keeping mission.

During these operations, amphibious operations have met the parameters that identify the operation as one that is usually at the operational level of war. Further, it has been established that when executed, amphibious operations are in fact the practice of operational art.

In an attempt to answer the original question of,
"Will amphibious operations be the operational response to
Third World confrontations?" it became necessary to
establish some assumptions. These assumptions not only
were based on options available to the NCA, but also to a
changing world situation. This changing world will
continue to impact on national interests, goals, and
strategic end states. Additional assumptions were where
U.S. forces would be committed in the future. Because of
the assumed location of where U.S. forces could be
committed in the future, it became clear that amphibious
operations offered an answer. This answer was based on
further assumptions that specific type forces (airborne)
at the operational level would not be able to be deployed
to a location to reach a desired strategic end state.

Though amphibious forces and operations may be part of the operational response in future Third World confrontations, operational art requires more than just \underline{a} response. There are other considerations.

To achieve the desired strategic end state and effect an enemy's center-of-gravity, there may be a need for a combination of forces with different capabilities. This combination of forces may be necessary to achieve favorable force ratios and capitalize on the unique capabilities of each.

Though amphibious forces and amphibious operations give a decided opportunity for mission accomplishment in a crisis, it is not the total answer. Though it could be the total answer for employment of forces with regards to operational art, it is not the total answer for a solution in a Third World confrontation.

Though an amphibious force has many unique capabilities, it will sometimes lack the ability of speed in responding to a crisis. Further, once used it is a unique force not available again until reembarked. Therefore, the integration and synchronized use of airborne and amphibious forces offers a solution and a force that will be hard to beat.

The practice of operational art is difficult at best. It is time for each service to realize the importance of this concept and learn to execute operational art in a timely fashion. Further, it is time

that each service worked together to accomplish and meet the national and strategic goals as established by the civilian leadership.

ENDNOTES

- 1 Robert D. Heinl, Dictionary of Military and Naval Quotations, (1984):12.
- ² Samuel B. Griffith, <u>Sun Tzu the Art of War</u>, (1963):88.
- ³ Wilbour J. Gibbons, "The Future of Amphibious Warfare," (Industrial College of the Armed Forces Thesis, 1989):i.
 - 4 Ibid:3.
 - 5 Ibid: 2.
 - ⁶ U.S. Army, FM 100-5, Operations, (1986):10.
 - 7 Ibid.
- 8 U.S. Army, FM 100-6, Large Unit Operations,
 (1987):1-1.
- 9 David A. Fastabend, "A Theory of Conflict and Operational Art," (SAMS Monograph, 1988):16.
 - 10 U.S. Army, FM 100-5:10.
- 11 AFSC Pub 1, The Joint Staff Officer's Guide 1988, (1988):213.
 - 12 Ibid.
 - 13 Ibid:212.
- 14 Ibid. This page provides excellent definitions for military mission options.
- 15 Frederic E. Abt, "The Operational End State: Cornerstone of the Operational Level of War," (SAMS Monograph, 1988):7.
 - 16 John Spanier, Games Nations Play, (1984):96.
 - 17 Ibid:260.
 - 18 Ibid:261.
- 19 Thomas C. Linn, "Strike from the Sea," Proceedings, (Nov 1989):34.
 - 20 Ibid.

- 21 Ibid:37.
- 22 Frank C. Carlucci, Annual Report to the Congress (1989):34.
 - 23 Ibid:33.
 - 24 Ibid:34.
 - 25 Ibid.
- ²⁶ Gerard Chaliand and Jean-Pierre Rageau, <u>A</u> Strategic Atlas, (1983):75.
- ²⁷ Gene D. Hendrickson, "A Vision of the Marine Corps," (Feb 1990):14.
- 28 U.S. Marine Corps, Amphibious Doctrine,
 (1983):5.
 - 29 Ibid:6.
 - 30 Ibid.
 - 31 Ibid.
 - 32 Ibid.
 - 33 U.S. Army, FM 100-5:10.
- 34 Herbert C. Merillat, <u>Guadalcanal Remembered</u>, (1982):22.
 - 35 Ibid:23.
 - 36 Ibid.
 - 37 Ibid.
- 38 Philip A. Crowl and Jeter A. Isely, <u>The U.S.</u>
 <u>Marines and Amphibious War</u>, (1951):73.
 - 39 U.S. Army, FM 100-5:10.
- 40 Merrill L. Bartlett, <u>Assault from the Sea</u>, (1983):338.
 - 41 Ibid:339.
 - 42 Ibid.
 - 43 Ibid:351.
 - 44 U.S. Army, FM 100-5:10.

- 45 Bartlett: 375.
- 46 Ibid.
- 47 Ibid.
- 48 Ibid.
- 49 U.S. Army, FM 100-5:10.
- 50 Chaliand and Rageau: 60.
- 51 Ibid:61.
- 52 Ibid.
- 53 Colin Gray, "The Maritime Strategy is Not New," Proceedings, (Dec 1988):71.
- 54 These points were taken from P511 class notes of CGSC, Ft. Leavenworth, AY 88-89.
- 55 Douglas A. Goepfert, "The Army in Amphibious Warfare," (CGSC Thesis, 1987):19.
- 56 U.S. Army, Student Text 100-1, Navy and Marine Corps, (1988):G-6.
 - 57 Ibid: 4-29.
 - 58 Goepfert:18.
- 59 Robert H. Howe, "Tomorrow's Gator Navy," Proceedings, (Dec 1988):64.
- 60 U.S. Marine Corps, <u>Amphibious Doctrine</u>, (1983):129.
 - 61 Victor H. Krulak, First to Fight, (1984):202.
 - 62 Ibid:203.
 - 63 Ibid.
 - 64 U.S. Army, Student Text 100-1, (1988):G-10.
- 65 U.S. Marine Corps, <u>Marine Air Ground Task</u> Forces, (1985):12.
 - 66 Ibid.
 - 67 U.S. Army, FM 100-5:10.
 - 68 Ibid:179.

- 69 Charles M. Province, <u>The Unknown Patton</u>, (1983):198.
 - 70 Ibid:199.
- 71 U.S. Army, Combined Arms Fundamentals,
 (1988):53.
- 72 John F.W. Caldwell, "Forced Entry: Does the Current Airborne Division Still Retain this Capability under the Light Infantry Tables of Organization and Equipment," (SAMS Monograph, 1987):35.
- 73 Richard W. Kokko, "Joint Operations Involving Marine and Army Airborne Forces, (1988):13.
 - 7 i Ibid: 7.
 - 75 U.S. T-my, FM 100-5:28.
- 76 U.S. Army, Student Text 100-1, Navy and Marine Corps, Ft. Leavenworth, AY 88-89:4-30.
 - 77 Ibid:4-31.
 - 78 Ibid:4-33.

BIBLIOGRAPHY

Books

- Bartlett, Merrill L. <u>Assault from the Sea</u>. Annapolis: Naval Institute Press, 1983.
- Bowman, William R. <u>Limiting Conventional Forces in Europe</u>. Washington, D.C.: National Defense University Press, 1985.
- Carlucci, Frank C. Annual Report to Congress Fiscal Year 1990. Washington, D.C.: U.S. Government Printing Office, 1989.
- Crowl, Philip A. and Isely, Jeter A. <u>The U.S. Marines and Amphibious War</u>. New Jersey: Princeton University Press, 1951.
- Griffith, Samuel B. <u>Sun Tzu the Art of War</u>. New York: Oxford University Press, 1963.
- Hart, Liddell B.H. <u>Strategy</u>. New York: The New American Library, Inc., 1974.
- Hastings, Max and Jenkins, Simon. The Bat'le for the Falklands. New York: W.W. Norton and Company, 1983.
- Heinl, Robert D. Jr., Colonel, USMC. <u>Victory at High Tide</u>. Maryland: The Nautical and Aviation Publishing Company of America, 1979.
- Krause, Joachim. <u>Prospects for Conventional Arms Control in Europe</u>. New York: Institute for East-West Security Studies, 1988.
- Krulak, Victor H. <u>First to Fight</u>. Annapolis: Naval Institute Press, 1984.
- Langley, Michael. <u>Inchon Landing</u>. New York: The New York Times Book Co., Inc., 1979.
- Merillat, Herbert C. <u>Guadalcanal Remembered</u>. New York: Dodd, Mead and Company, 1982.
- Province, Charles M. <u>The Unknown Patton</u>. New York: Bonanza Books, 1983.
- Rayan, Paul B. <u>The Iranian Rescue Mission Why it Failed</u>. Annapolis: Naval Institute Press, 1985.

- Tetlow, Edwin. <u>The Enigma of Hastings</u>. New York: St. Martin's Press, Inc., 1974.
- Theeler Richard. A Special Valor the U.S. Marines and the Pacific War. New York: Harper and Row Publishers, 1983.
- Young, Desmond. Rommel the Desert Fox. New York: Harper and Row, 1978.

Government Publications

- AFSC Pub 1. The Joint Staff Officers Guide 1988.
 Virginia: National Defense University, 1988.
- Field Manual 100-1, <u>The Army</u>. Washington, D.C.: Headquarters, Department of the Army, 1986.
- Field Manual 100-5, <u>Operations</u>. Washington, D.C.: Headquarters, Department of the Army, 1986.
- Field Manual 100-6, <u>Large Unit Operations</u>. Fort Leavenworth: U.S. Army Command and General Staff College, 1987.
- Field Manual 100-15, <u>Corps Operations</u>. Washington, D.C.: Headquarters, Department of the Army, 1988.
- Fleet Marine Force Manual 3-1, <u>Command and Staff Action</u>. Washington, D.C.: Headquarters, United States Marine Corps, 1979.
- Marine Corps Institute. <u>Amphibious Doctrine</u>. Washington, D.C.: Marine Barracks, 1983.
- Marine Corps Institute. <u>Maritime Strategy</u>.
 Washington, D.C.: Marine Barracks, 1983.
- NAVMC 2710, Marine Air Ground Task Forces (MAGTFS).
 Washington, D.C.: Headquarters, United States
 Marine Corps, 1985.
- U.S. Army. <u>Combined Arms Fundamentals</u>. Ft. Leavenworth: U.S. Army Command and General Staff College, 1988.
- U.S. Army. Student Text 100-1, Navy and Marine Corps. Ft. Leavenworth: U.S. Army Command and General Staff College, 1988.

Theses and Papers

- Abt, Frederic E. "The Operational End State:
 Cornerstone of the Operational Level of War."
 School of Advanced Military Studies, U.S. Army
 Command and General Staff College, 1988.
- Belcher, Bruce R. "Operation Chromite: What Lessons are Applicable to our Current Amphibious Warfare Strategy?" Naval War College, 1988.
- Caldwell, John F.W. "Forced Entry: Does the Current Airborne Division Still Retain this Capability under the Light Infantry Tables of Organization and Equipment?" School of Advanced Military Studies, U.S. Army Command and General Staff College, 1987.
- Clark, Robert L. "The Essential Elements of Operational Surprise." School of Advanced Military Studies, U.S. Army Command and General Staff college, 1987.
- DeFranco, Joseph J. "The Marine Corps and the Maritime Strategy in the Pacific." Naval War College, 1988.
- Fastabend, David A. "A Theory of Conflict and Operational Art." School of Advanced Military Studies, U.S. Army Command and General Staff College, 1988.
- Gibbons, William J. "The Future of Amphibious Warfare."
 The Industrial College of the Armed Forces, Ft.
 McNair, 1989.
- Goepfert, Douglas A. "The Army in Amphibious Warfare."
 Thesis, U.S. Army Command and General Staff
 College, 1987.
- Hooper, Thomas A. "National Power, Strategic Goals, and Operational Art in the First World War: The Relationship." School of Advanced Military Studies, U.S. Army Command and General Staff College, 1988.
- Howard, Joseph B. "Amphibious Warfare and its Contribution to U.S. National Strategy." Army War College, Carlisle Barracks, PA, 1973.
- Kokko, Richard W. "Joint Operations Involving Marine Amphibious Forces and Army Airborne Forces."
 Naval War College, 1988.

- Tomlin, Harry A. "The Focus of the U.S. Army's Operational Art: A Question of Balance." School of Advanced military Studies, U.S. Army Command and General Staff College, 1989.
- U.S. Army Field Force. "Report of Army Advisory Panel on Joint Amphibious Operations." Ft. Monroe: Office, Chief, Army Field Forces, 1949.

Articles

- Armstrong, Charles L. "Blueprint for Intervention,"

 Marine Corps Gazette, January 1990.
- Bartels, William E. and John W. Schmidt. "MEU (SOC): Smarter Operations and Fully Capable," <u>Marine</u> Corps Gazette, January 1990.
- Bevilacqua, Allan C. "Reinventing Amphibious Operations,"

 <u>Marine Corps Gazette</u>, December 1989.
- Bushnell, W. D. "Gallant Eagle '88," <u>Proceedings</u>,
 November 1988.
- Donovan, James A. "Reevaluating our Defense Posture," Marine Corps Gazette, May 1989.
- Earl, Robert L. "The Over-the-Horizon Alternatives," Marine Corps Gazette, October 1988.
- Gray, Colin. "The Maritime Strategy is not New," Proceedings, January 1990.
- Gregson, Wallace C. "Remembering the Maritime Side,"

 <u>Marine Corps Gazette</u>, August 1989.
- Hendrickson, Gene D. "A Vision of the Marine Corps,"

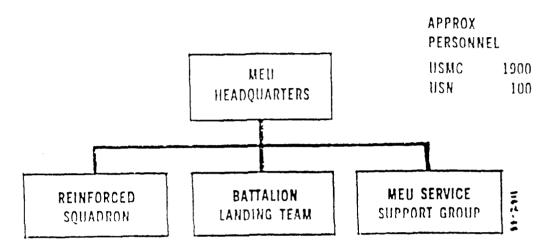
 <u>Marine Corps Gazette</u>, February 1990.
- Howe, Robert H. "Tomorrow's Gator Navy," <u>Proceedings</u>, December 1988.
- Jaroch, Roger M. "Supporting Land Warfare," <u>Proceedings</u>,
 November 1988.
- Karch, Lawrence G. "The Corps in 2001," <u>Proceedings</u>, November 1988.
- Linn, Thomas C. "Strike from the Sea," <u>Proceedings</u>, November 1989.
- Madrigan, Bron N. "MAGTF Planning Versus GCE Planning,"

 <u>Marine Corps Gazette</u>, May 1989.

- Matthews, William and Willis, Grant. "Officials' Drumbeat: Muscle up Marines, Navy," Army Times, February 1990.
- Nathan, James A. "How's the Strategy Playing with the Allies?" Proceedings, August 1988.
- Owens, William A. "The Maritime Strategy," <u>Proceedings</u>, February 1989.
- Rakow, William M. and Brinkley, Clyde S. "Rapid Response Planning," <u>Marine Corps Gazette</u>, June 1989.
- Rothwell, Richard B. "A Window on the Future of Amphibious Warfare Kernel Bl. z 88-1," Marine Corps Gazette, August 1988.
- Russell, William H. "Maritime and Amphibious Alternatives," <u>Marine Corps Gazette</u>, December 1989.
- Thompson, Ky L. "Moving the Marine Corps by Sea in the 1990's," Marine Corps Gazette, January 1990.
- Thompson, Ky L. "Some Thoughts on the Advanced Assault Amphibian Vehicle," <u>Marine Corps Gazette</u>, January 1989.

APPENDIX A

MARINE EXPEDITIONARY UNIT (MEU) (NOTIONAL TASK ORGANIZATION*)



AIRCRAFT/LAUNCHERS1

- 4 CH-53D/E
- 12 CH-46
- 2 UII-1
- 4 AH-1
- 5 STINGER TEAMS

MAJOR GROUND COMBAT EQUIPMENT

- 5 TANKS
- 8 81MM MORTARS
- 32 DRAGON TRACKERS
- 8 TOW LAUNCHERS
- 12 AAV

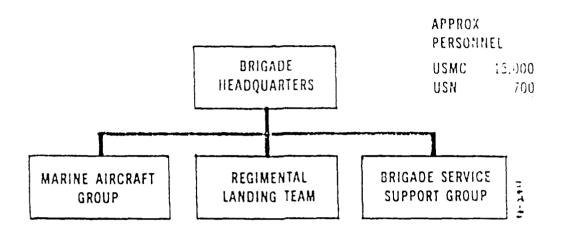
- 8 155MM HOW
- 9 60MM MORTARS
- 20 50 CAL MG
- 60 M-60 MG
- 26 MK-19 40MM GRENADE LAUNCHERS

*ACTUAL TASK ORGANIZATION FORMED TO ACCOMPLISH SPECIFIC MISSIONS MAY VARY FROM THE ORGANIZATION SHOWN.

THE ACE COULD BE REINFORCED BY 1 VMA DET (6 AV-8) AS THE TACTICAL SITUATION DICTATES. 76

APPENDIX B

MARINE EXPEDITIONARY BRIGADE (MEB) (NOTIONAL TASK ORGANIZATION*)



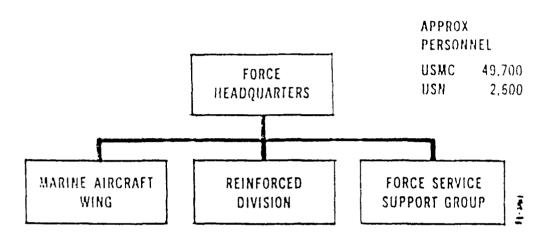
AIRCRAFT/LAUNCHERS!					MAJOR GROUND COMBAT SQUIPMENT				
20	AV-3B o	r 19	A-4M	17	TANKS	24	155MM HOW (T)		
24	F/A-18 o	r 24	F-4	24	31MM MORTARS	6	155MM HOW (SP)		
10	A-6	8	CH-53E	96	DRAGON TRACKERS	6	3" HOW (SP)		
4	EA-6	20	CH-53D	48	TOW LAUNCHERS	27	60MM MORTARS		
4	RF-4B	48	CH-46	47	AAV	138	BU CAL MG		
5	0A-4M	12	UII-1	36	VAJ	255	M-50 MG		
	XC-130 0V-10		AH-1 HAWK LAUNCHERS			114	MK-19 TOMM GRENADE LAUNCHERS		
		15	STINGER TEAMS						

^{*}ACTUAL TASK ORGANIZATION FORMED TO ACCOMPLISH SPECIFIC MISSIONS MAY VARY FROM THE ORGANIZATION SHOWN.

THE AVIATION FORCE SHOWN, WHEN ADDED TO AN MPS FORCE LIST, EQUALS APPROXIMATELY 1/3 OF THE TOTAL ACTIVE AVIATION FORCE ASSETS. THIS FORCE IS NOT IDEAL (FOR EXAMPLE: 24 ATTACK HELOS ARE THE RECOGNIZED MINIMUM TO PROPERLY SUPPORT A MAB). 77

APPENDIX C

MARINE EXPEDITIONARY FORCE (MEF) (NOTIONAL TASK ORGANIZATION*)



AIRCRAFT/LA	UNCHERS!		MAJOR GROUND	COMBAT	EQUIPMENT
nc 88-VA 04	38 A-4M	70	TANKS	90	155MM HOW
48 F/A-18 or	48 F-4	72	81MM MORTARS	18	155MM HOW (SP)
20 A-6	16 CH-53E	288	DRAGON TRACKERS	12	8" HOW (SP)
8 EA-6	32 CH-53D	144	TOW LAUNCHERS	81	60MM MORTARS
8 RF-4B	50 CH-46	208	AAV	435	50 ÇAL MG
9 TA-4/0A-4	24 UH-1	147	LAV	601	M-60 MG
12 KC-130	24 AH-1			345	MK-19 40MM
12 OV-10	24 HAWK LAUNCHERS				GRENADE
	75 STINGER TEAMS				LAUNCHERS

*ACTUAL TASK ORGANIZATION FORMED TO ACCOMPLISH SPECIFIC MISSIONS MAY YARY FROM THE ORGANIZATION SHOWN.

THE AVIATION FORCE SHOWN EQUALS APPROXIMATELY 1/3 OF THE TOTAL ACTIVE AVIATION FORCE ASSETS. THIS FORCE IS NOT IDEAL (FOR EXAMPLE: 72 ATTACK HELOS ARE THE RECOGNIZED MINIMUM TO PROPERLY SUPPORT A MAF). 78